[11] [21] 51074

[54] ISOQUINOLINIUM DERIVATIVES, THEIR PREPARATION AND PHARMACEUTICAL COMPOSITIONS CONTAINING THEM

תולדות איזוקוינוליניום, הכנתן
ותכשירי רוקחות המכילים אותן

[71] The Wellcome Foundation Limited, London, England

[51] Int. Cl.³ C07D 217/10, 405/10, A61K 31/47

הסוגים:

[22] 9.XII.1976

[33] United Kingdom [31] 50589
" " 45028

[32] 10.XII.1975   הממלכה המאוחדת
[32] 29.X.1976   " "

[74] Dr. Reinhold Cohn and Partners,
P.O.B. 4060, Tel Aviv

ד"ר ריינהולד כהן ושוחפיו,
ת.ד. 4060, תל-אביב

[57]   Compounds of the formula

$$\left[Z^1 \cdots \overset{+}{N} \underset{R^4}{\underset{R^2}{\diagdown}} A.CO.O.L.O.CO.B \underset{R^5}{\underset{R^3}{N}} \cdots Z^2 \right] 2X^-$$
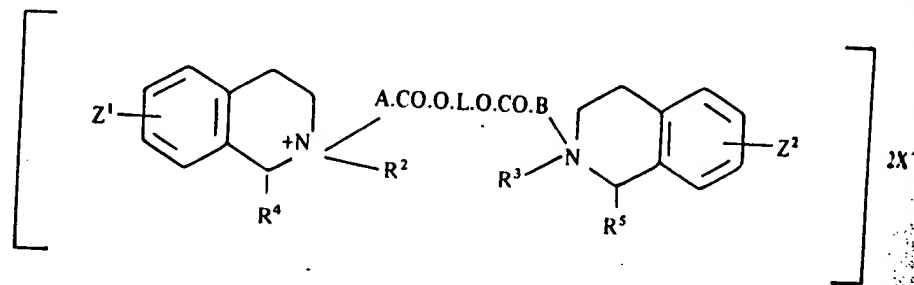
wherein Z^1 and Z^2 are the same or different and each represents a methylenedioxy substituent, or up to three methoxy substituents;

R^2 and R^3 are the same or different and each is alkyl having 1–3 carbon atoms;

R^4 and R^5 are the same or different and each is a benzyl or phenethyl group wherein the phenyl ring is optionally substituted by one or more of halogen, alkoxy having 1 to 3 carbon atoms and methylenedioxy;

A and B are the same or different and each is an alkylene radical containing 1, 2 or 3 carbon atoms;

L is an alkylene chain having from 2 to 12 carbon atoms or is a group $-L'.O.L^1-$ wherein each of L' and L^2 is alkylene having at least two carbon atoms and taken together L' and L^2 have up to 11 carbon atoms; and

X^- is an anion.

The process for the preparation of such

677

May 30, 1980 — ערב ניסן תש"ם

compounds comprises inter alia:

(a) quaternising a ditertiary base of the formula

Z^1—[isoquinoline ring structure]—N.A.CO.O.L.O.CO.B.

R^4

[second isoquinoline ring structure with N, Z^2]

R^5

or a corresponding monotertiary base wherein one of the isoquinoline groups is substituted in the 2- position by a group R^2 or R^3, with a quaternising agent suitable for introducing one or both of R^2 and R^3 as appropriate; or

(b)   esterifying a compound of the formula

Z^1—[isoquinoline ring structure with N$^+$]—R^2

J.Q

R^4
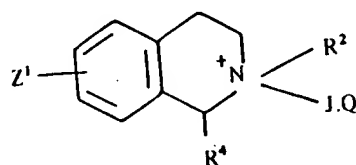
by reaction with a compound of formula

$$Q^1.L.Q^2$$

wherein J is alkylene having 1 to 3 carbon atoms, Q and Q^1 are functional groups or atoms which react together to form an ester linkage, and Q^2 is a functional group which will react with Q to form an ester linkage or a group.

The compounds are for use as active ingredients of pharmaceutical compositions having neuromuscular blocking activity.

—١